

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of )  
CHARLES P. CARLE and SILVEIRA RANCHES )  
for Review of Orders Nos. 80-16 and )  
80-22, NPDES Permit No. CA 0037851, )  
of the California Regional Water Quality )  
Control Board, San Francisco Bay Region. )  
Our Files Nos. A-271 and A-272. )

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Order No. WQ 81-7

BY THE BOARD:

On April 15, 1980, the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board) adopted water reclamation requirements in Order No. 80-16 and waste discharge requirements in Order No. 80-22 (NPDES Permit No. CA 0037851) for the Las Gallinas Valley Sanitary District (discharger) in Marin County. The waste discharge requirements prohibit the discharge of wastewater from the discharger's sewage treatment plant to waters of the State during the dry weather months and set forth effluent and receiving water limitations. The water reclamation requirements establish specifications and limitations for the use of reclaimed wastewater from the treatment plant in an agricultural irrigation project during the dry weather prohibition period.<sup>1/</sup>

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1. Order No. 80-22 was amended on September 16, 1980 to change the prohibition period for the discharge of wastewater from five months to three months. This amendment does not affect any of the issues raised in this appeal.

On May 13, 1980, the State Water Resources Control Board (State Board) received a petition from Charles P. Carle (Carle) seeking review of the orders. On May 15, 1980, the State Board received a petition from Silveira Ranches (Silveira) seeking a stay and review of the orders. As the petitions both seek review of the same orders, and raise some issues in common, they are hereby consolidated for purposes of review.

### I. BACKGROUND

Las Gallinas Valley Sanitary District operates a sewage treatment plant which discharges an average of 2.0 million gallons per day (mgd) of domestic and industrial wastes into the tidal portion of Miller Creek. Miller Creek is a dead-end tidal slough which affords virtually no mixing or dilution of the waste. The discharge into the creek flows toward shellfish beds located at China Camp in San Pablo Bay.

The District participated in a cooperative planning process over several years, along with other Marin and Sonoma sanitation agencies, the Regional Board, the State Board and the U. S. Environmental Protection Agency. The result of that process was the East Marin/Southern Sonoma Wastewater Management Plan. This plan analyzed the treatment alternatives of several discharges in the area, including Las Gallinas, and recommended specific projects. Grant funds for the projects to be constructed will be provided by the federal and state governments. The Wastewater Management Plan includes upgrading the District's treatment plant to provide full secondary treatment plus nitrification

and filtration, and reclamation and reuse of effluent from the plant during the dry weather months to irrigate pasture acreage. A storage pond and a wildlife pond will also be constructed. The reclamation project was the alternative selected by the District for confining its wastes on land during the dry weather months.

A final EIR/EIS for the Wastewater Management Plan was completed in June, 1979. Included in the plan was a Bay-Estuary Study to evaluate various outfall proposals under consideration. One component of the Bay Studies was an aquatic impact analysis of the deep and shallow water of San Pablo Bay. At the time the EIR/EIS was completed, preliminary results of the Bay Studies were available. The Bay Studies were completed as part of the Step 2 design and the results were published in a Final Report in November, 1980.

In the orders before us, the Regional Board has sought to implement a prohibition contained in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) against the discharge of waste to confined water bodies (i.e. waters which do not provide a 10:1 dilution for wastewater). The orders call for a prohibition on discharges to Miller Creek during the dry weather months, and permit use of reclaimed wastewater for agricultural irrigation during those months. The orders also provide for upgrading the Las Gallinas treatment plant.

Petitioner Silveira is a local landowner and petitioner Carle is a local citizen. Both oppose the water reclamation project and the prohibition on discharges to Miller Creek.

Petitioner Silveira claims that the orders require the agricultural irrigation project be conducted solely on the petitioner's property, and that there is no evidence that the San Francisco Bay is being damaged by the present dry weather discharges. Petitioner Carle contends that the prior waste discharge requirements, permitting year-round discharges to the Bay, should be reinstated.

## II. CONTENTIONS AND FINDINGS

1. Contention: Petitioner Carle contends that the Regional Board did not permit adequate discussion of the ammonia limits included in Order No. 80-22.

Finding: Order No. 80-22 contains effluent limitations on the discharge of total ammonia as nitrogen (N). This limitation is derived from water quality objectives found in the Basin Plan. The Regional Board was required to implement the Basin Plan objective through the waste discharge requirements, Water Code Section 13263(a), and the Regional Board was therefore not required to permit discussion of the validity of these limits. In any event, a review of the transcript from the Regional Board meeting at which the order was adopted reveals that there was discussion of the ammonia limits, and that petitioner Carle was given full opportunity to voice his views. We conclude that this contention is without merit.

2. Contention: Petitioner Carle contends that the effluent limits on ammonia and pH in Order No. 80-22 are inappropriate. Carle argues that if proper studies had been conducted, it would be shown that limits on ammonia and pH are unnecessary.

Finding: Order No. 80-22 contains effluent limitations on discharges to waters of the State for constituents including pH and ammonia. The limit on pH provides that this factor shall not exceed 8.5 nor be less than 6.5. These same limits appear in the Basin Plan, which has been approved by this Board. As was discussed above, the Regional Board was required to implement the Basin Plan through the waste discharge requirements, and was not required to conduct further tests to validate the objectives contained therein. In addition, petitioner Carle has presented no evidence to show that this limitation is inappropriate.

The ammonia limit is also derived from the Basin Plan. The effluent limitations found in the order are, for ammonia as N, 6.0 mg/l for each 30-day average and 4.5 mg/l for an annual average. These figures were arrived at by calculating the limitations necessary to implement the water quality objectives in the Basin Plan for the receiving water. The basis for the objectives in the Basin Plan is well-founded, since un-ionized ammonia is a significant source of toxicity in receiving waters, caused in part by municipal effluent. We conclude that the limits established for pH and ammonia are appropriate.

3. Contention: Both petitioners claim that the EIR/EIS is inadequate. The petitioners contend that the Regional Board did not have before it sufficient information to support the requirements since the Bay Studies were not completed when the EIR/EIS was published. The Bay Studies included an aquatic impact analysis for the receiving waters, which the petitioners

claim was crucial to a final decision on the requirements. The petitioners further contend that a separate aquatic impact analysis for the Las Gallinas discharge would have provided more information regarding the feasibility of an outfall to Miller Creek.

Finding: The arguments of the petitioners appear to focus on the need to analyze the receiving waters of the Las Gallinas discharge in order to justify the effluent limitations and prohibitions in the requirements. In adopting the requirements, the Regional Board applied a prohibition on discharges to confined water bodies and effluent limitations found in the Basin Plan. The Regional Board was correct in adopting requirements which implement the Basin Plan.

In addition, the information the Regional Board had before it at the time of the adoption of the requirements confirmed the need for the prohibition and the effluent limitations. The Bay Studies were begun as part of the EIR/EIS process, which covered several discharges in the Eastern Marin/Southern Sonoma area. The predesign phase of the Bay Studies included four programs: (1) a literature review of the current knowledge of water quality in the area; (2) a mathematical model to compare outfall alternatives; (3) verification of the mathematical model; and (4) aquatic sampling of deep and shallow water of San Pablo and San Rafael Bays and the Petaluma River.

While the Bay Studies had not been completed at the time the requirements were adopted, preliminary results were

included in the final EIR/EIS.<sup>2/</sup> The studies which were included in the EIR/EIS, which was published prior to adoption of the requirements, demonstrated that discharges from the Las Gallinas treatment plant flow toward shellfish beds at China Camp. These discharges contribute to a ban which the State Department of Health Services placed on the opening of shellfish in the area.

As to the claim that the EIR/EIS is not complete, we find that the information contained therein was sufficient to support the requirements, as discussed above. There is no evidence that the petitioners contested the EIR/EIS in court, and the document is conclusively presumed to comply with legal requirements.<sup>3/</sup> Public Resources Code Section 21167.2.

Petitioner Carle also argues that an aquatic impact analysis was required by the contract which the District signed for preparation of the EIR/EIS. The question of any breach of contract is not relevant to this Board's review.

The North Marin Bay Studies Final Report was published in November, 1980. The Bay Studies included an aquatic impact analysis. The analysis considered proposed combined outfalls from the Novato Sanitary District and the Las Gallinas District.

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2. The Las Gallinas District, along with other affected agencies, agreed to postpone completion of the Bay Studies pending receipt of Step 2 grant funds.
  3. At the workshop session on this matter, petitioner Silveira stated through its attorney that it did not contest the EIR/EIS in court because a separate EIR/EIS for the Las Gallinas discharge should have been completed. We find that the EIR/EIS, which covered several dischargers in the Eastern Marin/Southern Sonoma area, provided sufficient information regarding the Las Gallinas project.

The location of the sampling was near the existing and proposed Novato discharge point. While no independent sampling was done at the point of discharge from the Las Gallinas treatment plant, the beneficial uses affected by a discharge at the sampling points are very similar to those at the point of the Las Gallinas discharge.<sup>4/</sup> We conclude that the aquatic impact analysis as completed provides sufficient information regarding the Las Gallinas discharge and confirms the appropriateness of the Regional Board's orders. We also note that a requirement of a separate analysis for the Las Gallinas discharge would have resulted in costly delays in the project.

We therefore conclude that the petitioners' claims regarding the inadequacy of the EIR/EIS process are without merit.

4. Contention: Petitioner Silveira contends that the orders require that all reclaimed wastewater be disposed of on petitioner's property.

Finding: There is nothing in either order which requires reclamation on any specific property. Petitioner Silveira's contention is unfounded.

5. Contention: Petitioner Silveira claims that a publicly owned piece of property adjacent to the treatment is amenable to disposal of treated wastewater. The petitioner

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4. The Final Report concluded that the proposed discharges to the Bay would be very small. This conclusion was based on the assumption of a prohibition on dry-weather flows from the Las Gallinas treatment plant, rather than a year-round flow as argued by petitioner Carle at the workshop session.

further claims that this property is below sea level and could be developed as a marshland.

Finding: As we have stated above, at Number 4, the orders nowhere specify which property or properties are to be used for reclamation. The requirements have in no way precluded the use of the land in question, unless such use would conflict with the general provisions in the requirements.

In support of its argument that the public lands should be developed as a marshland, petitioner Silveira states that the Regional Board should have considered this alternative and the State Board policy expressed in State Board Resolution No. 79-20.<sup>5/</sup> We have recently had occasion to address an identical contention in State Board Order No. 80-20. In that order, we found that ~~Order~~<sup>Res.</sup> No. 79-20 was limited in scope to Humboldt Bay and that the Regional Board was not bound to follow the result therein. We also stated that the Regional Board's fundamental role is the protection of water quality, and that it need not pursue wetlands projects unless water quality protection is assured.<sup>?</sup> We therefore conclude that this contention is without merit.

6. Contention: Petitioner Silveira contends that no economic analysis was performed regarding agricultural reclamation, and that the ability or desire of landowners and water users to participate in such a project was not considered.

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5. In Resolution No. 79-20, the State Board found that a marsh treatment process proposed by the City of Arcata may enhance the water quality in Humboldt Bay.

Finding: In the EIR/EIS, the effect of the proposed project on the local economy was considered. It was concluded that a substantial benefit to the economy would ensue. In any event, the Regional Board has not required summer disposal via agricultural irrigation with reclaimed wastewater. Rather, the Regional Board has set limitations for the reclamation project which was selected by the discharger. We conclude that this contention is without merit.

7. Contention: Petitioner Silveira contends that the Regional Board has required agricultural irrigation without establishing the ability to control potential problems such as soil degradation, crop production and vector control.

Finding: A North Marin Agricultural Reclamation Study Report was conducted as part of the Final Facilities Plan submitted in the Step 1 grant process. This study analyzed soil degradation considerations and mosquito and other vector concerns. In addition, these potential problems are addressed in Order No. 80-16. The order states that the EIR/EIS concluded that the project could have adverse impacts on the environment including mosquito and midge control and degradation of soil. The discharger is required by Order No. 80-16 to design and manage the treatment and irrigation facilities to mitigate these potential adverse impacts. In addition, Reclaimed Wastewater Use Limitation C.7. prohibits wastewater irrigation ponding which could provide a breeding area for mosquitoes, and Prohibition A.2. requires authorization by the Executive Officer prior to discharge of wastewater on any specific

field. We also note that the Regional Board did not, in its orders, require agricultural irrigation. We conclude that the orders provide sufficient protection against problems concerning soil degradation, crop production and vector control.

8. Contention: Petitioner Silveira contends that there is no evidence of damage to the Bay by the discharge of secondarily treated effluent. Further, the petitioner argues that the voters in the area rejected a ballot issue aimed at funding the project.

Finding: The prohibition on discharges to the Bay is set forth in the Basin Plan. It is based upon the cumulative effect of all discharges to the Bay, and has been approved by this Board. Order No. 80-22 is based upon that prohibition. There is no requirement that evidence supporting a prohibition in a Basin Plan be presented each time new requirements are written. The petitioner's claim regarding the bond issue is irrelevant to water quality issues. We note, however, that in November 1980 a second election was held on a similar bond issue, and the bond issue was approved by the voters. We conclude that the prohibition on discharges to the Bay is appropriate.

9. Contention: Petitioner Silveira claims that agricultural irrigation has proven ineffective because a nearby landowner unsuccessfully tried such irrigation.

Finding: The petitioner presented no evidence to support this claim, and it is doubtful in any event that conclusions could be drawn from the experience of one farmer. We note that in his testimony, petitioner Carle stated that the farmer in question elected to cease farming operations and instead to develop his land. We conclude that the petitioner's claim is without merit.

10. Contention: Petitioner Silveira contends that the Regional Board did not adequately investigate the alternative of an outfall to the Bay. The petitioner further claims that if disposal to the Bay is hazardous, disposal to land must be equally hazardous.

Finding: The Final Facilities Plan, which was the result of ten years of study, investigated a number of treatment alternatives, including outfalls to the Bay, the creation of wetlands, and water reclamation. Outfalls are also evaluated in the EIR/EIS. A number of factors, including the necessity to protect the shellfish beds, resulted in the selection of reclamation as the preferred alternative. Again, this was the project which the discharger presented to the Regional Board. We conclude that there was adequate investigation of an outfall alternative.

The petitioner's claim regarding the respective hazards of disposal to the Bay and to land is not well taken. The prohibition on the discharge of nutrients contained in sewage wastewater to the Bay is based on the toxic impact of such a discharge on aquatic life. The addition of such a discharge to soil, however, may result in the nutrients acting as a fertilizer to encourage crop production. We therefore conclude that the petitioner's contention is without merit.

### III. REQUEST FOR STAY

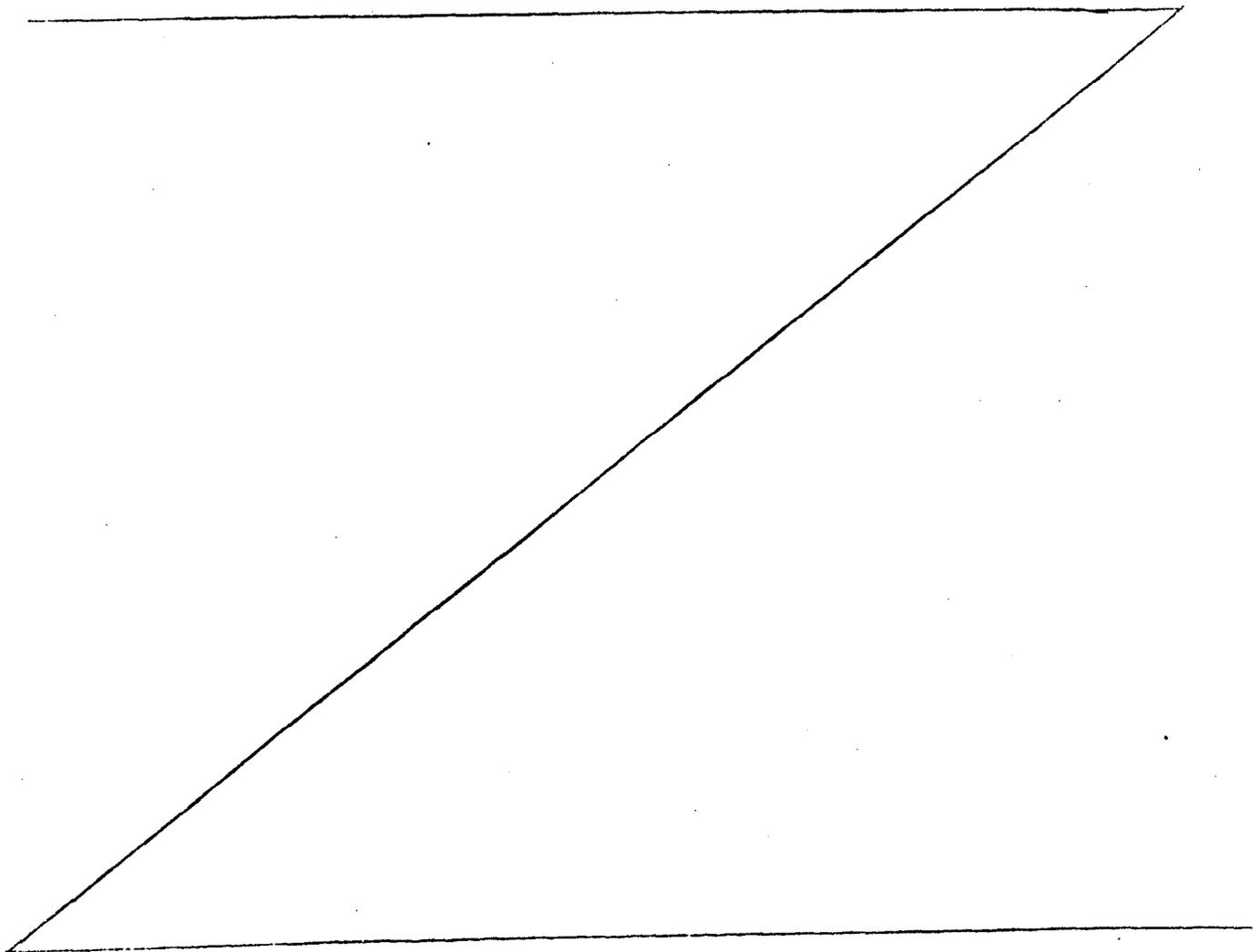
Petitioner Silveira has requested that a stay of the Regional Board's order be granted. Since we are now disposing of the petition on the merits, the request for a stay is moot.

#### IV. CONCLUSIONS

1. The Regional Board acted reasonably in adopting waste discharge requirements which prohibit discharges to Miller Creek during the dry weather months and establishing limitations for discharge of effluent to Miller Creek during wet weather.

2. The Regional Board acted reasonably in adopting water reclamation requirements for the use of wastewater for agricultural irrigation.

3. The request for stay is moot.

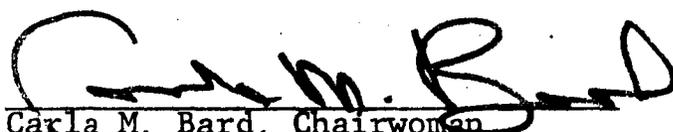


V. ORDER

IT IS HEREBY ORDERED that petitioner Silveira's request for a stay in this matter is denied.

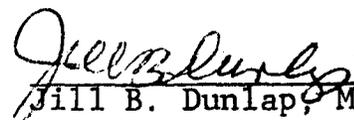
IT IS FURTHER ORDERED that the petitions of Charles P. Carle and Silveira Ranches for review of Orders Nos. 80-16 and 80-22, NPDES Permit No. CA 0037851, of the California Regional Water Quality Control Board, San Francisco Bay Region are denied.

DATED: April 16, 1981<sup>6/</sup>

  
Carla M. Bard, Chairwoman

**ABSENT**

L. L. Mitchell, Vice-Chairman

  
Jill B. Dunlap, Member

  
F. K. Aljibury, Member

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6. This Order supersedes and replaces our earlier Order No. WQ 81-4. The effective date of adoption of the instant Order is April 16, 1981.